Federal Aviation Administration – Regulations and Policies
Aviation Rulemaking Advisory Committee

Transport Airplane and Engine Issue Area
Ice Protection Harmonization Working Group

Task 8 – Part 25 Supercooled Large Droplet (SLD) rule

AK11-20

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

JAN 13 2005

Mr. Craig R. Bolt
Assistant Chair, Aviation Rulemaking
Advisory Committee
Pratt & Whitney
400 Main Street, Mail Stop 162-14
East Hartford, CT 06108

Dear Mr. Bolt:

We are changing task 2 assigned to the Ice Protection Harmonization Working Group because of an oversight when we initially assigned the task.

Engine installation and engine icing requirements are in Title 14, Code of Federal Regulations, parts 25 and 33, respectively. When we assigned the task, we addressed part 25 icing requirements, but we failed to adequately address part 33 engine icing requirements. Modifications to part 33 engine icing requirements may be necessary to ensure engines certificated under part 33 can be installed on part 25 airplanes certificated to the new supercooled large droplet icing environment.

As written, task 2 allows the Aviation Rulemaking Advisory Committee (ARAC) to recommend rulemaking development for part 33, but it does not allow ARAC to provide the exact regulatory language. By correcting this oversight, ARAC can provide regulatory language as well as harmonize the language with the European Aviation Safety Agency certification specifications.

Therefore, we are revising the task to read as follows:

> Review National Transportation Safety Board recommendations A-96-54, A-96-56, and A-96-58, and advances in ice protection state-of-the-art. In light of this review, define an icing environment that includes supercooled large droplets (SLD), and devise requirements to assess the ability of aircraft to safely operate either for the period of time to exit or to operate without restriction in SLD aloft, in SLD at or near the surface, and in mixed phase conditions if such conditions are determined to be more hazardous than the liquid phase icing environment containing supercooled water droplets. Consider the effects of icing requirement changes on 14 CFR part 25 ***and part 33*** and

revise the regulations if necessary. In addition, consider the need for a regulation that requires installation of a means to discriminate between conditions within and outside the certification envelope.

Sincerely,

Anthony F. Fazio
Director, Office of Rulemaking